S. fluctuans (Morong) Robinson may be expected in the larger ponds and lakes of northwestern Rhode Island.

S. lucidum Fernald & Eames, as yet known only from eastern Massachusetts, Pennsylvania, Illinois and Missouri, is probably in Rhode Island and Connecticut.

S. minimum Fries may be confidently sought in clear cold streams of northern New Hampshire.

S. simplex Huds. is apparently rare in northern and central Maine and northern Vermont, but it should be sought in all the larger lakes of northern New England.

GRAY HERBARIUM.

CAUSES OF VARIATION IN COLOR IN SOME RED ALGAE.

WILLIAM A. TERRY.

FOR many years past I have noticed a marked difference in color in specimens of red algae from different localities; this is specially noticeable in *Dasya elegans* (Mart.) Ag.; plants from South Beach, a mile or more east of the entrance to New Haven harbor, always drying a sepia brown, while those from below Woodmont, some miles west, dry a dark purple, and those from Fort Hale, inside the harbor, show a bright crimson pink color. These differences are constant, and have shown themselves so for many years. My specimens are taken, when possible, directly from the rocks on which they grow; they are generally procured by wading at lowest tide, but sometimes from a boat by means of a sharp-edged scraper with a long handle. Such specimens are much deeper in color than those from shallow water. When broken from their holdfasts they change rapidly in color, in a few hours showing a decided tinge of brown. All these fine red seaweeds, if mounted in salt water, lose their characteristic color from the concentration of the salt, and become more or less black. To obviate this as much as possible, I lay out and cleanse the plant in a dish of salt water, then transfer on the cardboard to a mounting board in fresh water, rapidly place and lift out of the water, drain slightly and place in driers which are changed frequently until dry. In this

way much of the original color remains in some species; others obstinately persist in turning black when drying. The different behavior of plants apparently quite similar led me to make some experiments last November, which gave me new light on the question. I found most beautiful plants of the delicate Callithamnion of a most brilliant rosy color growing in deep water on the reef at Woodmont, and was much disappointed to find them losing their color in drying. I had used sometimes the city water and sometimes water from the shallow wells of the region in mounting, and I found a slight difference in favor of the city water; I then experimented with rain water, with marked success. It was evident that the mineral dissolved in the ordinary water was sufficient to destroy the color in drying.

The rocks on which the seaweeds grow at South Beach are red granite. The beach contains a large amount of red sand, sufficiently heavy to be easily separated from the quartz sand by washing. A superficial examination seems to show zircon and garnet, and a mineralogist to whom I sent a sample said that it contained about two per cent of monazite. The rocks on which the red Dasya grows at Fort Hale are trap. The purple Dasya at Woodmont grows on a curious shale or slate, that suggests the vicinity of magnesian limestone. It is penetrated by fresh water springs from the mainland, the water containing iron and lime.

THE SCIENTIFIC NAME OF THE OSAGE ORANGE.—The Osage Orange, although it has borne in the past a variety of scientific names, appears to have no designation which is in accord with the Vienna Rules. These legitimize the generic name *Maclura* of Nuttall but necessitate the restoration of the earlier specific name of Rafinesque. The needed binomial and its synonymy are as follows:—

Maclura pomifera (Raf.), n. comb.

Ioxylon pomiferum Raf. Am. Monthly Mag. ii. 118 (1817).

Maclura aurantiaca Nutt. Gen. ii. 233 (1818).

Broussonetia tinctoria Spreng. Syst. iii. 901 (1826) in part, not HBK.

Toxylon aurantiacum Raf. Med. Fl. ii. 268 (1830).

T. Maclura Raf. New Fl. N. A. iii. 43 (1836).

Toxylon pomiferum Sarg. Silv. vii. 89 (1895).

B. L. ROBINSON.